

## AMENDMENT AND RESPONSE

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Serial No.: 10/027,926

Filing Date: 12/22/2001

Attorney Docket No. 100.268US01

Title: MESSAGE-BASED COMMUNICATION OVER BUS BETWEEN CARDS IN AN ELECTRONIC MODULE

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**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of claims:**

1. (Currently amended) A method for communicating between cards in an electronic module, the method comprising:
  - generating a message for transmission at a first card in the electronic module;
  - transmitting the message over a bus to a second card in the same electronic module by-passing an IP stack at the first card;
  - monitoring a queue at the second card for messages from the first card; and
  - reading a message from the queue at the second card when ~~received~~ received from the first card.
2. (Original) The method of claim 1, wherein transmitting the message comprises transmitting the message over a cell bus.
3. (Original) The method of claim 1, wherein generating a message for transmission comprises generating a message for transmission between an application on the first card and an application on the second card.
4. (Currently amended) The method of claim 1, wherein generating the message for transmission comprises:
  - allocating memory for the message;
  - populating the memory with the message; and
  - plac[c]ing the message in a queue for transmission.
5. (Currently amended) The method of claim 1, and further comprising creating and registering ~~a message~~ the queue at the second card for a selected application.

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6. (Currently amended) A method for communicating between cards in an electronic module, the method comprising:

generating a message for transmission from an application at a first card in the electronic module to an associated application at a second card in the same electronic module;

transmitting the message over a cell-based bus as a message to the second card by-passing an IP stack;

queuing the message in a queue for the associated application at the second card;

monitoring the queue at the second card for messages from the first card; and

reading a message from the queue at the second card when received from the first card.

7. (Currently amended) A method for communicating between cards in a digital subscriber line access multiplexer (DSLAM), the method comprising:

generating a message for transmission from an application at a first card in the DSLAM to an associated application at a second card in the same DSLAM;

by-passing the IP stack for the message;

queuing the message at the first card;

transmitting the message over a cell-based bus as a message to the second card;

queuing the message in a queue for the associated application at the second card;

monitoring the queue at the second card for messages from the first card; and

reading the message from the queue at the second card when received from the first card.

8. (Original) The method of claim 7, wherein generating a message comprises generating a request by a connection admission control (CAC) application in the first card for data from a CAC application in a second card for use by the CAC application in the first card.

9. (Original) An electronic module, comprising:

a first card including at least one application running on the first card;

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a second card including at least one related application running on the second card;

a bus, communicatively coupled to both the first and the second cards;

wherein communication between the at least one application on the first card and the at least one application on the second card is accomplished by messages passed over the bus between the first and second cards by-passing the IP stack on the first and second cards.

10. (Currently amended) ~~The electronic module of claim 9, wherein the first card includes~~  
An electronic module, comprising:

a first card including at least one application running on the first card;

a second card including at least one related application running on the second card;

a bus, communicatively coupled to both the first and the second cards;

wherein communication between the at least one application on the first card and the at least one application on the second card is accomplished by an inter-card communication module that selectively queues messages communicated between the boards the first card and the second card so as to by-pass the IP stack of the first card.

11. (New) A circuit for communicating between cards in an electronic module, the circuit comprising:

means for routing messages intended for related applications running separately on each of the cards in the electronic module; and

means, responsive to the means for routing, for periodically monitoring a registered message queue that bypasses an IP stack on each of the cards.

12. (New) The circuit of claim 11, wherein the means for routing the messages includes a virtual channel on a cell bus.

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13. (New) The circuit of claim 11, wherein the means for periodically monitoring a registered message queue that bypasses an IP stack on each of the cards includes an inter-card communications module.